

Astrodynamics

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This book is going to serve as an introduction to the field of astrodynamics, especially from a practical, engineering perspective. We will focus our attention on man-made satellites, and the dynamics of orbiting such satellites around the earth, the moon, and other "local" objects. We will look at practical applications, such as earth-orbits, lunar and inter-planetary trajectories, ballistic missiles, and interstellar escape trajectories.

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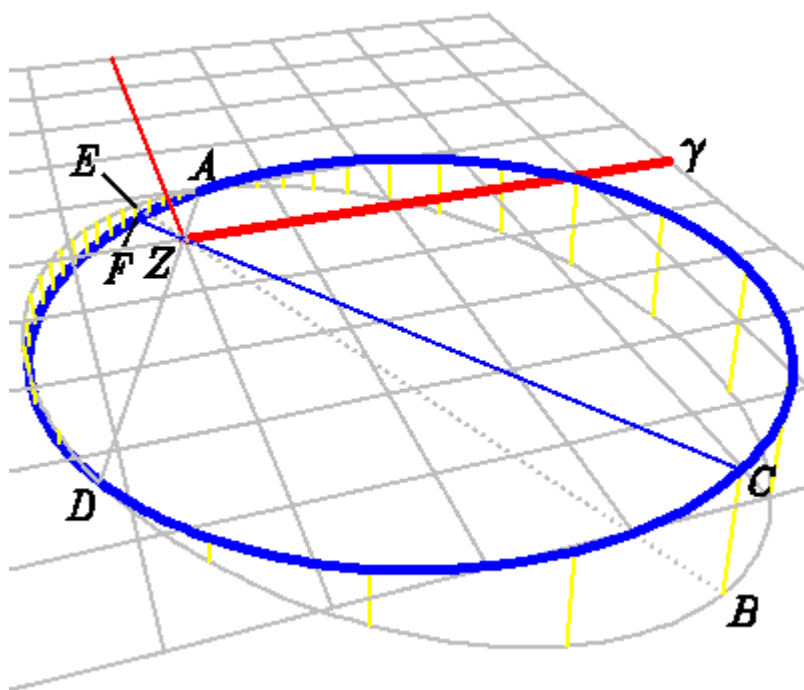
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- Out-of-Plane Orbit Changes

Section 5: Specific Trajectories

- Ballistic Trajectories
- Lunar Trajectories
- Interplanetary Trajectories

Further Reading

- R. Bate, D. Mueller, J. White (1971) *Fundamentals of Astrodynamics*, Dover Publications, New York. ISBN 0486600610
- Richard H. Battin (1999) *An Introduction to the Mathematics and Methods of Astrodynamics*, AIAA Education Series. ISBN 1563473429
- J. Prussing, B. Conway (1993) *Orbital Mechanics*, Oxford University Press Inc., New York, ISBN 9780195078343
- Francis J. Hale (1994) *Introduction to Space Flight*, Prentice-Hall, Inc., ISBN 0134819128
- Modern Physics (Gravity)
- Calculus
- Space Transport and Engineering Methods

See also

- Astronomy
 - Classical Mechanics
 - Conic Sections
 - Space Transport and Engineering Methods
 - Orbital Mechanics (<http://www.braeunig.us/space/orbmech.htm>)
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